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- (71) Applicant (for all designated States except US): THE UNIVERSITY OF WATERLOO [CA/CA]; 200 University Avenue West, Waterloo, Ontario N2L 3G1 (CA).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): GAUTHIER, Mario [CA/CA]; 503-547 Belmont Avenue West, Kitchener, Ontario N2M 5G9 (CA). YUAN, Zhongshun [CA/CA]; 221-104 Seagram Drive, Waterloo, Ontario N2L 3B8 (CA).
- (74) Agents: CHARI, Santosh, K. et al.; Blake, Cassels & Graydon LLP, 199 Bay Street, Suite 2800, Box 25, Commerce Court West, Toronto, Ontario M5L 1A9 (CA).
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(54) Title: METHODS FOR SYNTHESIS OF GRAFT POLYMERS

(57) Abstract: A process for the synthesis of arborescent polymers comprises epoxidation of a first polymer and grafting thereto a second polymer having groups reactive to the epoxide groups on the first polymer. The epoxidation and grafting steps can be repeated. In an additional embodiment, the present invention provides a one-pot method for the synthesis of arborescent polymers. In a reaction pot, a first polymer is copolymerized and then reacted with an activating compound in order to generate a polyfunctional macroinitiator. Monomers are then added to the reaction pot, the monomers having functional groups reactive towards reactive sites on the first polymer.

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